



# **Contents**

| Background Information and Specification of BoardWorks | 3  |
|--|----|
| Peer Review  | 3  |
| Theoretical Background                                 | 5  |
| Defining Board Effectiveness                           | 5  |
| Evidence supporting the structure of BoardWorks        | 8  |
| Dynamics Scoring Methodology                           | 10 |
| Administration and Rating Scales                       | 10 |
| Utilisation of Drive, Threat and Soothing              | 12 |
| Report Types   | 13 |
| Features and Benefits                                  | 13 |
| References   | 14 |

# **Background Information**& Specification of BoardWorks

BoardWorks is a new measure of Board Effectiveness and Psychological Safety. BoardWorks has evolved from Wbi, a validated and evidenced based model of Psychological Safety. It was created by Drummond & Co a National consultancy specialising in Board and Team Effectiveness, Psychological Safety across all industries and sectors.

#### **Peer Review**

Academic rigour is important to BoardWorks. Therefore, we have sought throughout our research and the creation of our reporting tools to have our research independently reviewed. To date, the basis of our initial research which led to the creation of Wbi, which is the basis for BoardWorks and TeamWorks has been published in a Peer Reviewed Journal by our colleague Lex Vendrig an eminent International Clinical Psychologist (Reliability and Validity of the Work and Well-Being Inventory (WBI), 2018) for Employees and also in our work with Clinical Psychologist colleagues in The Journal of Psychiatric and Mental Health, 2020.

Our research has heavily influenced the design and delivery and the implementation of both BoardWorks and TeamWorks. Thirteen years of working in this field has provided us with the granular evidence of how to apply our research in a practical and meaningful way. The combination of the research and this practical evidence has further shaped and influenced the ongoing development of both of these tools and reflects the context within which, this document is provided.







For clarity, Wbi was created following our research project with Wellbeing Works / Drummond HR and Newcastle University working with Professor John Matthews the leading medical statistician. Wbi was the model upon which BoardWorks and TeamWorks were created. Wbi provided the underpinning evidence of the impact of Psychological Safety upon individuals and when combining this with the aggregation of data at Board, Team and Group levels along with their lived, worked experience we have been able to provide reporting mechanisms backed by practical recommendations for implementation for Boards, Teams and Work groups.

Utilising the basis of Wbi, we have also utilised Professor Paul Gilberts model of Drive, Threat and Soothing. (The Compassionate Mind, 20019) This enables the translation of the complexities of the data to be understood, by individuals in the Board.

BoardWorks is able to provide an insight on Board Governance, Board Composition, and Board Dynamics. It specifically measures the level Psychological Safety of the Board

Armed with this Boards are better able to cope with the demands they face in changing times.

It is designed to support Chairs, Chief Executives and Board Members.

It consists of scales which measure the components of an effective Board. In the area of Board Dynamics (specifically Psychological Safety) it provides an insight into the effect of how Board members feel and hence the impact upon the Boards capacity to function optimally.

The output from BoardWorks provides a comprehensive and holistic framework. It is used to support the development of a Boards capability to function optimally and to bring about the necessary changes that enable Boards to respond in a time of unprecedented change.

This document outlines the research evidence upon which BoardWorks is based and provides direct references to peer reviewed journals in which Wbi and related matters are published.

### **Theoretical Background**

### **Defining Board Effectiveness**

Board effectiveness has been the subject of many research initiatives. Harvard Business Review (Sonnenfeld, 2002) highlighted the need to focus on Board effectiveness following the demise of companies such as Enron, TYCO, Worldcom, for example. In this early work Harvard Business Review articulated the need for "fundamentally new thinking about how Boards should operate and be evaluated." It also placed a spotlight on the need to evaluate "the social system of a Board". For clarity the social system of a Board is the way in which a Board chooses to work, the behaviour and attitude prevalent at the Board and how the Board organises its work and who sits on the Board.



This thinking mirrored the early work of Professor Amy Edmondson (Psychological Safety and Learning Behaviour in Work Teams – Administrative Science Quarterly, Vol44 June 1992.)

This paper presented a model of team learning and introduced the construct of Team Psychological Safety. It highlighted the relationship between Psychological Safety, Team Performance and Team Behaviours.

This seminal work challenged earlier work on Team Performance (Goodman, Devadas, and Hughson. 1988) and subsequent works such as (Cohen and Ledford, and works by Goodman, Ravlin, and Schminke 1987). The prevailing orthodoxy prior to the work of Edmondson promulgated the belief that Team success was largely based on organisational and Team structures.





Edmondson's later work built some of Argyris 1993 publication which showed that tacit beliefs regarding interactions between individuals was a critical factor regarding the ability of teams to learn how to be more effective.

Interestingly Edmondson's 1999 paper (Administrative Science Quarterly) highlighted that in some environments admitting to errors or highlighting problems and/or asking for help, reduced the tendency for some teams to conform and supress information, and this early work led to the growing interest in the value of measuring Psychological Safety by the creators of BoardWorks.

Central to our belief is the view that if Boards have the mechanisms in place to allow the right items to reach the Board in a timely and succinct form, with a Board that has a diverse composition (Harvard Business Review, March 2019)) operating with a culture that is Psychologically Safe then Boards will have the capability to operate effectively.

Our Wbi research comprised of 224 original questions and we were influenced by Edmondson's 1999 paper included matters such as "seeking or giving feedback", "engaging in constructive conflict or confrontation", "In this team you aren't rejected for being yourself or stating what you think".

These questions formed the basis of the Wbi research with Newcastle Uni 2008 -2013. The research led to the creation of the eventual and refined Wbi model. The model measures Psychological Safety with high levels of predictive capability, this was reviewed by Lex Vendrig and was published in the Journal of Occupational Rehabilitation (2018)

Edmondson identified the concept of Teaming (Harvard Business review Dec 2013). Teaming refers to collaboration in the way in which groups of individuals work collectively. This work further highlighted the value of the interrelationships between Team members, quoting for example the ability to safely ask questions, especially ones from a diverse perspective, for others to listen to the responses especially ones of diverse perspective and illuminated the idea that Teams need to work in a manner that was as safe as it could be.

This paper emphasised the need for leaders to model appropriate behaviours.

Since Boards ultimately create organisational culture, our focus has been on Board functionality which led to the detailed development work underpinning BoardWorks.

Over the last ten years, a wide-ranging spectrum of academic literature about management, teams, strategic board operations, culture, leadership, and performance have influenced how BoardWorks has been constructed, designed and tested and launched. The literature that has most significantly influenced this work is set out in some detail below.

Edmondson's (2018) presciently highlighted the significance of Teams needing to be more agile especially in those sectors deemed to fall within the "knowledge economy". The Academy of Management Review (2017) indicated that 65% of those in these sectors are now working as "multi-teamers".

This work built upon Edmondson's book "How organisations learn and compete in the knowledge economy" (2012) and highlighted the importance of recognising the social and cognitive barriers to Teaming and roles that leaders need to play in creating Psychological Safe work cultures. (p60 and p135)

Professor Michael Wade of IMD a leading Swiss Academic Institution, highlights the value an insight into the value of Boards mindsets and hence capabilities to be able to respond to the challenges post Covid-19 his paper (2020) It illustrates that Boards that are able to work in a more Psychologically Safe manner will be able to cope more effectively with changes in consumer expectation and engagement, trends in innovation, developments in the business landscape and effective integration with other related sectors.

Keiterp (2017) Leadership and Organisational Development INSEAD, reinforced thinking regarding Board diversity and she recommended that all Boards should understand the fundamentals of the components of a well-run Board. A key question in her work was: "My board possesses the required competencies to fulfil its duties"

The widely reported Project Aristotle, conducted by Google, evaluated 180 teams attempted to define what made an effective team and challenged "what is a Team?". This work fundamentally highlighted the need for Teams to recognise that to be effective they needed to be highly interdependent rather than being based on hierarchy, and ones that predominantly shared information. This interdependence illustrated the value of understanding of how teams solve problems, how they make decisions, how they review progress. Interestingly one of the key questions in terms of these dynamics was "I felt safe in expressing divergent opinions to the team" which links strongly to the concept of Psychological Safety in relation to the individuals perception of the consequences of taking an interpersonal risk. The Aristotle project reported the need for Teams to be able to take risks for it to be safe for individuals to be seen as challenging or disruptive by way of asking difficult or challenging questions as an example. The work also highlighted the capacity of a team to have sufficient time to work on key issues, a clear understanding of role expectations and for work to be focused in areas that will make a difference.



# **Evidence supporting** the structure of BoardWorks

The three central components of the BoardWorks report are Governance, Composition and Dynamics (Psychological Safety)

#### In relation to Governance:

We note that in the public sector, the National Leadership Council highlighted in their Board Development paper entitled the "Healthy NHS Board" refers directly to the need to operate constructively and openly. It Highlights the need for Board disciplines which have appropriate information provided in a timely way.

In the Private Sector, the Harvard Business Review (Sept 2002) highlighted matters such as regular meeting attendance and performance evaluation of the Board as being critical activities for Board Effectiveness.

#### In relation to Board composition:

The OECD paper on Board Composition by Professor Paul Davies (2000) highlighted some of the characteristics of effective Board composition. This was subsequently reinforced by the work of Adams, Hermalim and Weisbach (2009) Berkley University. This focused upon the make-up of Boards. More recently the Harvard Business Review (March 2019) Creary, McDonnall Ghai and Scruggs – "When and Why Diversity Improves Your Board Performance." Revealingly, California law requires (2020) all publicly traded companies must now have at least one female Director whilst in Norway, Spain and France they are required to have on at least 40% of all Boards are required one female director.





The representative composition of Boards reflecting diversity of stakeholders is an increasing priority across all sectors. For example, within the NHS, the Workforce Race Equality Standard provides data for Boards on the strategic approach to race equality and the impact it is or is not having on the operating model of the organisation and lived working experience of BAME staff. Employers with more than 250 employees are required by law to publish annual data about their gender pay gap. Profiling and the production of gender equality audits is increasingly important for Board's credibility. In the Third sector, the Institute for Employment studies paper (No.95, 2014) by Mercer illustrated the significance of this.

The Financial Reporting Council paper in Sept 2018 in conjunction with the University of Exeter (Sealy Page, Tilbury and Opara) showed the value of diversity at a Board level in FTSE 250 and 350 companies with only a third of FTSE 100 companies achieving best practice and only 50 % of FTSE 250 in this category, no evidence for FTSE 350 provided. The recommendations in this report reflected the 2016 HM Treasury Report, Women in Finance Charter.

The updated review by Sir John Parker, entitled "Ethnic Diversity Enriching Business Leadership" (2020) highlights the value of boards having a diverse representation. This report indicated that only 7.5% of FTSE 350 companies have information relating to the ethnicity of board members available for publication.

In the housing sector, the Chartered Institute of Housing highlighted the value of a diverse representation in their Savills report of 2019.

We are also cognisant of the contents of Teaming (2013) The Fearless Organization (2018) both by Professor Amy Edmondson and The Occupational H&S report, (Feb 2020) Krapivin, Forbes Magazine (Feb 2020). Also see HR Magazine (Dec 2018)



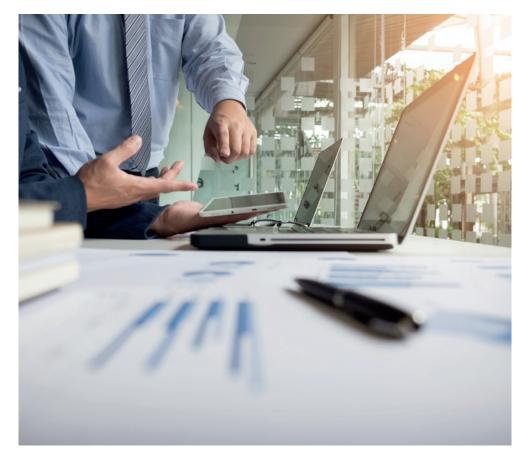
# **Dynamics Scoring Methodology**

**Administration and Rating Scales** 

| No. of Index<br>Items | Foundations            | No. of<br>Foundation<br>Items | Subscales |
|-----------------------|------------------------|-------------------------------|-----------|
| 24                    | Work Demands           | 5                             |           |
|                       | Work Impact            | 5                             |           |
|                       | Board<br>Relationships | 6                             |           |
|                       | Coping Skills          | 3                             |           |
|                       | Board Conduct          | 5                             |           |

BoardWorks is administered as an online Psychometric tool with all instructions provided on screen. The Dynamic element of BoardWorks contains 24 Statements. There is a 4-point Likert scale for respondents to express the extent to which they agree or disagree with each statement (Strongly Disagree, Disagree, Agree, Strongly Agree)

There is a good balance phraseology within BoardWorks to help reduce aquiesence bias



The original statistical analysis on Wbi was carried out by Professor John Matthews team, see below:

"Drummond Human Resource Specialists ("Drummond"), the holding company for Wbi and subsequent developments of TeamWorks and BoardWorks invited the University to assist in the statistical evaluation of research data which they had collected. The Wellbeing Inventory subsequently entitled Wbi, which originally asked 132 questions of an individual with the aim of identifying factors that may predict absence from work for 10 days and, also Presenteeism at work in the forthcoming year. Drummond then asked us as an independent body, (Newcastle University's Industrial Statistics Research Unit) (ISRU), to propose a scope of work to support this activity through the application of appropriate statistical tools and methodologies.

A selection strategy was used to create a sample of 606 UK individuals and it was felt that the resulting sample was a good representation of Drummond's client base in terms of variables such as gender and ethnicity and other protected characteristics. The sample base largely reflected the occupational make-up of the UK. Because the respondents' absence data for the previous year was going to be used to construct the predictive model, it was stipulated that the data collection plan would also require employees' contract start dates and (if applicable) end dates to ensure consistency.

Through a combination of different techniques (Best Subsets Regression, Factor Analysis, Item Analysis and Rational Analysis) the WBI was reduced from 132 questions to just 87 questions. These techniques not only reduced the questionnaire in size (which would help to improve response rate later) but also confirmed that the questions retained were measuring the scales (e.g. Stress, Fatigue, Anxiety etc.) they were originally intended to measure.

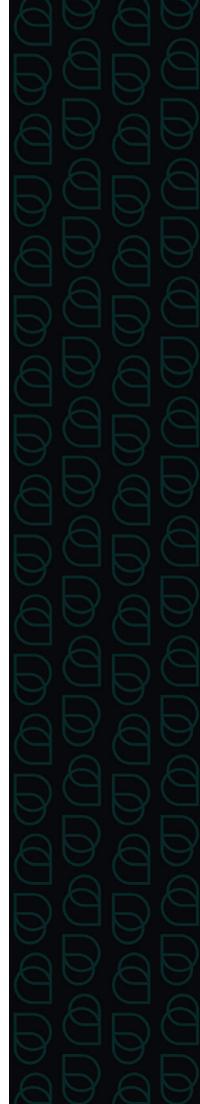
When the responses from the 606 individuals to the 87 questions were combined with the previous year's absence data, a technique called Binary Logistic Regression was carried out to analyse the results. 70% of the respondents were randomly selected to build the predictive model while the remaining 30% were used to validate it. This helped to ensure that the model would not only be suitable for this data but also for future data.

In terms of prediction ability, the terms Sensitivity and Specificity must be introduced. Sensitivity measures the proportion of actual positives which are correctly identified as such (e.g. the percentage of individuals who were absent for more than 10 days who are correctly identified as such). Specificity measures the proportion of negatives which are correctly identified (e.g. the percentage of individuals who were not absent for more than 10 days who are correctly identified as such).

The analysis of this data generated a predictive model that was 79.0% accurate. The specificity was 89.9% and the sensitivity was 25.0%. This means that in organisations that are similar to those in Drummond's client base, the model can correctly predict non-absentees as being such 9 out of 10 times.

We can confirm that Drummond accepted our independent scope and approach in terms of how our work was carried out."

Newcastle University's Industrial Statistics Research Unit (ISRU), 2011.





# **Utilisation of Drive, Threat and Soothing**

Boardworks also reports at a more granular level using the Drive, Threat and Soothing model by Professor Paul Gilbert. We acknowledge his generous assistance in allowing us to use this model.

The model enables boards to understand at a granular level, those activities, processes or behaviours which are likely to motivate or pressures the Board, those activities which are likely to pose a threat to Board members/collectively to the Board or undermine its effectiveness and Soothing those activities or behaviours which are likely to enable Board Members to flourish.

This categorisation allows Boards to focus in terms of priority actions, those activities most likely to fall within their control and hence enable them to make the most rapid progress especially when adapting to seismic challenges.

The application of Drive, Threat and Soothing has been found to be effective in many organisations with which we have worked, and its impact is reported in (Derby Uni 2020)

The Drive, Threat and Soothing model uses language which is easy to understand and resonates with people at an individual level.

The Thriving, Hiving and Surviving terminology uses language which enables Boards to see the impact of the data upon their Board and hence identify those collective actions that are required for the Board to become more effective.



# **Report Types**

Two types of Board Report are available:

The first report is available for Boards that have both Executives and Non-Executives, the report provides analysis for both these groups. The report provides good practice recommendations for the attention of the Board.

An alternative version is for Boards that are comprised solely of Executive Directors. It provides good practice recommendations for good practice and consideration by the Board.

Where Boards have unique terminology, for example Governors, Trustees, Special Advisors, there is the capability to adapt the terminology in the report. This allows you to reflect the appropriate terms by which these groups are known.

### **Features and Benefits**

#### **Features**

- Credible and easy to use
- Quick to complete
- Briefing and feedback on results provided by experienced Board Advisors
- Practical and systematic in approach
- Easy to understand what is being measured and why
- Suitable for Boards that are either Executive only or Boards with a combination of Executive and Non-Executive
- Reflects current best practice
- Appropriate and relevant in a time of seismic change

#### **Benefits**

- Insightful analysis of your Boards' effectiveness
- Clear measurement of the Boards level of Psychological Safety
- Identifies areas of strength and weakness
- ◆ Data directly relevant to your organisation
- Feedback to the Board on the significance of data arising (virtual or on person)
- Action plan for the Board to consider implementing
- Visible demonstration to regulatory bodies where appropriate, of a commitment to good governance





### References

Adams et al (2006) A Framework for Assessing Corporate Governance Reform, Berkley University, California

Argyris, C (1993) Knowledge for Action: A Guide to Overcoming Barriers to Organisational Change, Jossey-Bass, San Francisco

Cohen et al (1994) 'Effectiveness of Self-Managing Teams' Human Relations, Vol 47 (Pp 13-43)

Creary et al (2019) 'When and Why Board Diversity Improves Your Performance', Harvard Business Review, Boston, (March 27, 2019)

Davies, P (2000) Board Composition, Structures, Duties and Powers, OECD, Paris, (7th December 2000)

Delizoona, L (2017) 'High Performing Teams Need Psychological Safety', Harvard Business Review, Boston, (24th August 2017)

Duhigg, C (2016) 'What Google Learned from its Quest to Build the Perfect Team', New York Times Magazine (26 February 2016)

Edmondson, A (1999) 'Psychological Safety and Learning Behaviour in Work Teams', Administrative Science Quarterly, Vol. 44, No. 2 (Jun 1999), pp. 350-383

Edmondson, A (2012) Teaming: How Organisations Learn, Innovate and Compete in the Knowledge Economy, Jossey-Bass, San Francisco

Edmondson, A (2013) 'The Three Pillars of a Teaming Culture' Harvard Business Review, Boston, (December 2013)

Edmondson, A (2013) Teaming, John Wiley & Sons, New Jersey

Edmondson, A (2018) The Fearless Organization, John Wiley & Sons, New Jersey

Edmondson, A (2020) Key to Worker Happiness and Team Productivity, Occupational Health and Safety Journal

Goodman et al (1988) Groups and Productivity in Organisations, Jossey-Bass, San-Francisco (Pp295 – 327)

Keiterp (2017) Board Governance, INSEAD, Paris, France

Krapivin (2020) 'How to Achieve Psychological Safety at Work' Forbes Magazine, (February 2020)

Moore, H (2017) 'Why Psychological Safety should be a Board Level Issue' Personnel Today, (Oct 2017)

Parker (2020) 'Ethnic Diversity Enriching Business Leadership' Parker Review, Ernst & Young, (February 2020)

Roderick, M et al (2004) Trust and Distrust In Organizations: Dilemmas and Approaches, Russell Sage Foundation

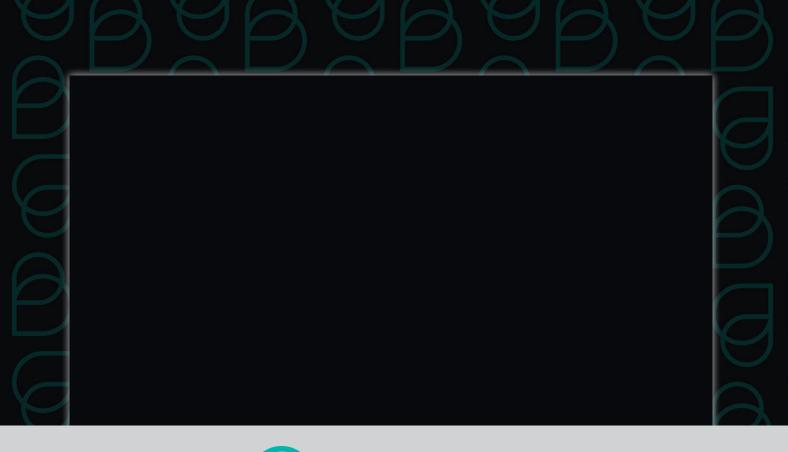
Sheng-min Liu (2015) 'Authentic Leadership and Whistleblowing: Mediating Roles of Psychological Safety and Personal Identification', Journal of Business Ethics, Vol. 131, No. 1 (September 2015), Pp 107-119

Sonnenfield, J (2002) 'What Makes Boards Great?' Harvard Business Review, Boston (September 2002)

Vendrip et al (2018) 'Reliability and Validity of the Work and Well-Being Inventory (WBI) for Employees' Journal of Occupational Rehabilitation, Vol 28 (8th September 2017) Pp 377-390

Wade, M (2020) 'Leading In Turbulent Times - Let's Not Survive but Thrive and Use Innovation To Do So', [Webinar] (IMD Lausanne Switzerland) – June 2020







For further information about BoardWorks or becoming a BoardWorks partner please contact:

### **Erica Legg**

erica@well-being-works.co.uk | 07939 606121

Other tools available from Wellbeing Works:

TeamWorks
Improving Psychological Safety

Wellbeing Works, 198 Heaton Road, Newcastle upon Tyne, NE6 5HP | www.well-being-works.co.uk

Linked in Wellbeing Works